POSING A SOLUTION IN ORDER TO DECREASE CUSTOMIZATION COSTS IN ERP PROJECTS

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ABSTRACT

Regarding heavy costs for implementing ERP systems and also heavy maintenance costs and heavy costs of adding facilities and applying changes and also business process reengineering in ERP projects, we need some tools to mechanize changes in customer requirements and develop ERP. So we will propose some tools in this case and also will discuss about how to operate the tools and user training and also culture making in this case and in order to get benefit from the mentioned tools.

KEYWORDS

ERP, customization, user, training, Implementation, requirements

1. INTRODUCTION

An ERP system uses some software and hardware components to integrate all departments of an organization. Integration in ERP systems is looked from two views: process and data. With an ERP system all Sales, Purchasing, Production planning and management as well as quality control, warehouses, human resource and accounting departments obliged to use the same process and the same data. So management and finding bottlenecks in organizations to improve operations becomes possible and easier. Costs of ERP system to do mentioned tasks and add some facilities in maintenance phase is so much and trying to reduce that is a positive point to employer and also contractor. Because it increases the costs for employer and causes repetitive affairs for contractors, Also users' avoidance to use system is one of other problems of ERP systems.

2. WHAT IS THE PROBLEM?

One of the major problems in ERP systems is adding facilities to them. Sometimes this changes need analysis and change processing structure. Also sometimes the changes are very minor and do not need very much analysis and design and we can complete the task by adding some forms and reports to the ERP system. But if you want to do the operation by contractor it will be costs so much and needs lots of planning and putting the task in the queue. For example we can take a look to adding a form to do transportation priority for product warehouse as some functions of supply chain management. This article will pose a flexible structure to add some facilities for data entry and reporting from ERP system. The operation will be done in run-time. It means that all the operation will be done after you logged in the system as an ERP user and not as a developer or designer.

3. PROPOSED SOLUTION TO TAKE OVER THE PROBLEM

In this approach a software tool will be introduced to design and create run-time forms and reports by customer and also making and designing necessity reports. This tool uses Asp.net tools and connects to oracle database to complete the operation. After that regarding name of the created form and appropriate fields, necessary SQL code will be generated automatically and dynamically in run-time and necessary entities and attributes will be created in database level. Also foreign keys and other database constraints will be created in database.

Also data type of each field will be gathered through the designed interface (Figure 1).

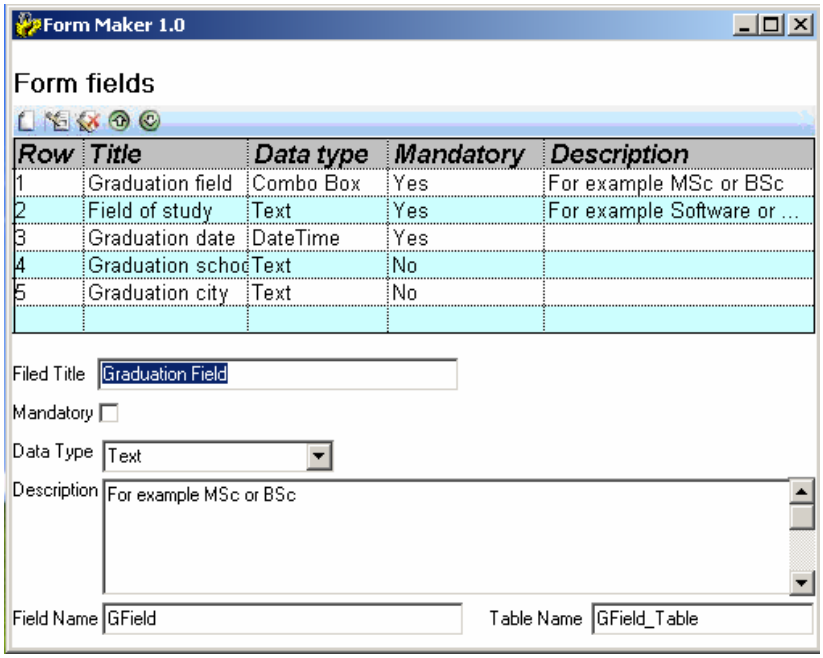

Figure 1

After that designed module will be shown to user to change place of controls and applying minor changes to make it more user friendly After that and after choosing menu path changes will be saved in the system and security access of mentioned form will be given to the creator and any body else he determined. It is necessary to say that, privilege of form and report creation should be given to the creator person by system administrator before. By adding the form, specification of that will be saved to the main project file automatically and in the run time and so customer will be able to extend ERP module, if any requirement change occurs.

Access of forms development and change will be given to a few people in the employer's organization and these people will be introduced by high management. Necessary training to use tools should be done for these people and appropriate people should be certified.

The other tools, which have been proposed is report generator. This tool makes a wizard for user to choose necessary attributed from appropriate entities and after that, tools will join the foreign keys and primary keys of the entities based on the logic, user defines and can support inner join and outer join features. After that a layout will be presented to the user and user can make the header, detail and footer as desired. In header you may have company's logo, company name, report title and report date. In detail you will have columns of the report, aggregate field and also general layout of the report. Also you can add a background to report for different purposes, such as to say if the report is real and legal or for test and un-legal.

In footer you can add page number, company's address, reporting time, and reporting date. Report generator is composed of SQL functions, asp.net functions and crystal report tools.

4. CONCLUSION

Even though, adding form generator and report generator tools to ERP will cause additional costs in implementing ERP systems, but it will have quick return of investment (ROI). In the implementation phase some people should be introduced from employer organization to get appropriate adding facilities to certificate.

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